

SUPPORT FOR THE AMENDMENT

This Amendment amends the specification; cancels Claim 3 and withdrawn Claims 9-10 and 16-21; and amends Claims 1-2, 5-7, 11 and 14. Support for the amendments is found in the specification and claims as originally filed. In particular, support for the amendments to the paragraph in the specification at page 23, lines 17-25, is found in the specification at least page 25, lines 7-8. Support for Claim 1 is found in the specification at least at page 25, lines 7-8; and page 25, line 27 to page 26, line 4. Support for "mass %" in Claims 5-7, 11 and 14 is found in the specification at least at page 11, lines 12-13 ("% means herein "mass%" unless otherwise specified). Additional support for Claims 7, 11 and 14 is found in the specification at page 25, line 27 to page 26, line 4. Additional support for Claim 11 is found in the specification at least at page 66, lines 8-9 ("the thickness of the resin coating film is set to 0.5 to 10 μm and the addition amount of the white pigment and/or luster pigment contained in the resin coating film is set to 1 to 25%"). Claims 7, 11 and 14 are rewritten in independent form. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-2, 4-8 and 11-15 will be pending in this application. Claims 1, 7, 11 and 14 are independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention provides a resin coated metal sheet in which a magnetic coating film containing a magnetic powder is coated on at least one surface of a metal sheet. The resin coated metal sheet provides excellent microwave absorbability. Specification at abstract.

Claims 1-2 and 4 are rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,539,148 ("Konishi").

Konishi discloses an electro-magnetic wave shielding structure having a shielding arrangement for preventing leakage of an electro-magnetic wave generated in a case of an electric apparatus. Konishi discloses conductive films are formed on inner faces of the case made of an electro-magnetic wave passing-through material, on surfaces of which are formed magnetically lossy layers of a thickness of **80 to 300 μm** which generally contains Mn-Mg-Zn group soft ferrite particles having an average diameter of 1 to 20 μm by **70 to 90 weight%**. Konishi at column 3, lines 45-54.

However, Konishi fails to disclose or suggest the independent Claim 1 limitations of a "resin coated metal sheet in which a magnetic coating film containing **20 to 60 mass%** of a magnetic powder is coated to a thickness from **3 to 50 μm** at least on one surface of a metal sheet".

The magnetic coating film thickness in the range of 3 to 50 μm provides a resin coated metal sheet which is excellent in bendability, film adhesion and corrosion resistance, as described in the specification at page 27, lines 21-25 and evidenced by the data in Table 1 (explained at page 96, line 21 to page 97, line 1). The magnetic powder content of 20 to 60 mass% provides sufficient microwave absorbability and prevents deterioration of bendability, film adhesion and corrosion resistance, as described in the specification at page 25, lines 14-21 and evidenced by the data in Tables 1-2 (explained on page 97, lines 7-14). In the present invention, by limiting the ranges of thickness of a magnetic coating film and of the magnetic powder content in a magnetic coating film, a resin coated metal sheet which is excellent in all the properties of microwave absorbability, bendability, film adhesion and corrosion resistance simultaneously can be obtained. These properties provide advantages for a material especially in construction of electronic equipment.

Because Konishi fails to disclose or suggest all the limitations of independent Claim 1, the rejection under 35 U.S.C. § 102(b) over Konishi should be withdrawn.

Claims 1-8 are rejected under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. US 2005/0163983 A1 ("Watase").

Watase discloses a coated body usable as the cabinet of an electronic device, the coated body attaining a reduction in the temperature inside of the electronic device (improved thermal radiation property) and having excellent electric conductivity. Watase at [0012]. Watase discloses that a blackening additive can be oxides and sulfides and carbides of Fe, Co, Ni, Cu, Mn, Mo, Ag or Sn, black fine metal powder or carbon black. Watase at [0141]. Watase discloses that the coated body can be imparted with excellent electric conductivity by including a conductive filler such as Ag, Zn, Fe, Ni and Cu; and metal compounds such as FeP. Watase at [0208]-[0209].

However, Watase fails to disclose or suggest the limitation of independent Claims 1 and 7 that "the magnetic powder is selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder". The soft magnetic ferrite powder, permalloy powder and sendust powder featured in independent Claims 1 and 7 have a characteristic of magnetic loss. In contrast, Watase's Fe powder and Ni powder do not have a characteristic of magnetic loss. Watase is silent about the microwave absorbability achieved by the present invention, and is instead directed towards improving the thermal radiation property and electric conductivity of a coated body, as described in [0012].

Because Watase fails to disclose or suggest all the limitations of independent Claims 1 and 7, the rejection under 35 U.S.C. § 102(e) over Watase should be withdrawn.

Claims 1-6 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,455,116 ("Nagano").

Nagano discloses an electromagnetic wave reflection-preventing material having a structure formed by successively laminating (A) an electromagnetic wave reflecting material layer; if needed, (B) a supporting layer; (C) a resin layer; if needed, (D) a supporting layer; and (E) a metallic pattern layer. Nagano at column 2, lines 16-21. Nagano discloses that the thickness of the resin layer (C) is in the range of about 50 μm to 3 mm. Nagano at column 3, lines 45-47. Nagano discloses that the amount of ferrite dispersed in the binder (resin) is in the range of 100 to 200 parts by weight per 100 parts by weight of binder. Nagano at column 4, lines 30-34.

However, Nagano fails to suggest the independent Claim 1 limitations of a "resin coated metal sheet in which a magnetic coating film containing 20 to 60 mass% of a magnetic powder is coated to a thickness from 3 to 50 μm at least on one surface of a metal sheet, wherein the magnetic powder is selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder".

As discussed above, the magnetic coating film thickness in the range of 3 to 50 μm provides a resin coated metal sheet which is excellent in bendability, film adhesion and corrosion resistance, as described in the specification at page 27, lines 21-25 and evidenced by the data in Table 1 (explained at page 96, line 21 to page 97, line 1). The magnetic powder content of 20 to 60 mass% provides sufficient microwave absorbability and prevents deterioration of bendability, film adhesion and corrosion resistance, as described in the specification at page 25, lines 14-21 and evidence by the data in Tables 1-2 (explained on page 97, lines 7-14). In the present invention, by limiting the ranges of thickness of a magnetic coating film and of the magnetic powder content in a magnetic coating film, a resin coated metal sheet which is excellent in all the properties of microwave absorbability, bendability, film adhesion and corrosion resistance simultaneously can be obtained. These

properties provide advantages for a material especially in construction of electronic equipment.

Because Nagano fails to suggest all the limitations of independent Claim 1, the rejection under 35 U.S.C. § 103(a) over Nagano should be withdrawn.

Claims 11-15 are rejected under 35 U.S.C. § 103(a) over Watase in further view of U.S. Patent No. 5,945,218 ("Nakao").

As discussed above, Watase fails to disclose or suggest the limitation that "the magnetic powder is selected from the group consisting of soft magnetic ferrite powder, permalloy powder and sendust powder", which limitation appears in independent Claims 11 and 14.

Nakao is silent about magnetic powder, and fails to remedy the deficiencies of Watase.

Because the cited prior art fails to suggest all the limitations of independent Claims 11 and 14, the rejection under 35 U.S.C. § 103(a) over Watase in further view of Nakao should be withdrawn.

The abstract is objected to. To obviate the objection, the abstract is amended.

The title is objected to. To obviate the objection, the title is amended as suggested by the Office Action.

The disclosure is objected to because of the word "whitely". To obviate the objection, the specification is amended.

Claim 11 is objected to. To obviate the objection, Claim 11 is amended to recite "... containing black additives, and a resin coating film containing ..." and "an addition amount of the white pigment and the luster pigment contained in each of the resin coating ~~film~~ films is from 1 to 25 mass% in total".

Claim 3 is rejected under 35 U.S.C. § 112, second paragraph. Claim 3 is canceled, so the rejection is moot and should be withdrawn.

Claims 5-6, 11 and 14 are rejected under 35 U.S.C. § 112, second paragraph. To obviate the rejection, Claims 5-6, 11 and 14 are amended to recite "mass%".

Claim 7 is rejected under 35 U.S.C. § 112, second paragraph. To obviate the rejection, Claim 7 is amended to provide antecedent basis for "the heat releasing magnetic coating film".

Claim 14 is rejected under 35 U.S.C. § 112, second paragraph. To obviate the rejection, Claim 14 is amended to recite "the heat releasing magnetic coating ~~paint~~ film" and "the heat releasing magnetic ~~resin~~ coating film".

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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